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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,209	06/24/2003	Morteza Gharib	06618-476003/CIT 3015-D-C	4365
20985	7590	10/08/2004	EXAMINER	
FISH & RICHARDSON, PC 12390 EL CAMINO REAL SAN DIEGO, CA 92130-2081			WHITE, DWAYNE J	
			ART UNIT	PAPER NUMBER

3745

DATE MAILED: 10/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/606,209	Applicant(s) GHARIB, MORTEZA	
	Examiner Dwayne J White	Art Unit 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20030604</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the cylindrical rod formed with an outer surface that has bumps with rounded edges, grooves having a deeper portion which is further spaced from the first rotatable element and a less deep portion which is less spaced from said first rotatable element and a system, comprising: a first bladder pump, comprising a central shaft rotating in a first direction within an outer housing that includes inner grooves thereon, forcing fluid through said outer housing in a force direction when said central shaft is rotated in said first direction; and a second bladeless pump assembly, located facing in a same direction as said first bladeless pump and comprising a central shaft, without blades, rotating in a second direction opposite to said first direction within an outer housing that includes inner grooves thereon, forcing fluid through said outer housing in said force direction when said central shaft is rotated in said second direction must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the

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drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

On page 7, line 11, "that rounded" should be --that have rounded--.

Appropriate correction is required.

The amendment filed 11 March 2004 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

Claim 6 recites, "spacing the first rotating element from the second rotating element."

Claim 9 recites, "bending the first rotation element and the second rotating element."

Claims 12-14, and 16 recites "each of said grooves having a deeper portion which is further spaced from the first rotatable element and a less deep portion which is less spaced from said first rotatable element."

Claim 15 recites "setting a depth between said deeper portion and said less deep portion as proportional to a diameter of said first rotatable element."

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Claim 26 and 27 recites “a system, comprising: a first bladder pump, comprising a central shaft rotating in a first direction within an outer housing that includes inner grooves thereon, forcing fluid through said outer housing in a force direction when said central shaft is rotated in said first direction; and a second blade less pump assembly, located facing in a same direction as said first bladeless pump and comprising a central shaft, without blades, rotating in a second direction opposite to said first direction within an outer housing that includes inner grooves thereon, forcing fluid through said outer housing in said force direction when said central shaft is rotated in said second direction.”

Applicant is required to cancel the new matter in the reply to this Office Action.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

Specifically, the specification does not disclose bending of a first and second rotating element, grooves having a deeper portion which is further spaced from the first rotatable element and a less deep portion which is less spaced from said first rotatable element or setting the depth between said deeper portion and said less deep portion as proportional to a diameter of said first rotatable element.

Claim Objections

Claim 27 is objected to because of the following informalities:

On line 2, “staff” should be --shaft--.

Appropriate correction is required.

Claim 6 recites the limitation "second rotating element" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "second rotating element" in line 2. There is insufficient antecedent basis for this limitation in the claim

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 10-16, 18-20 are 22-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Luijten et al. (4,270,882). Luijten et al. discloses a method of pumping a fluid comprising a causing an outward flow in a fluid between a rotating central shaft 2 and an outer housing 1. The central shaft has an outer surface that is substantially smooth and free of blades and has a constant diameter. A magnetic stator 14 is used to rotate the central shaft. The outer housing includes grooves 16 that are tilted in a specified direction (See Figure 3). The central shaft is spaced from the housing by an amount that prevents substantial leakage between the grooves. The method further comprises increasing the force of pumping by increasing the speed of rotation of the first element. It is the position of the Examiner that since the structure of the pump is disclosed, it would be possible for the pump of Luijten et al. to pump blood. Further, since propulsion is defined as the process of driving or propelling, it is the position of the

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Examiner the pump of Luijten et al. is driving the fluid and therefore is being used for propulsion.

CONCLUSION

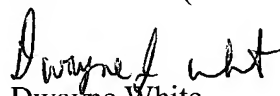
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwayne J White whose telephone number is (703) 306-3464.


The examiner can normally be reached on 7:30 am to 5 pm T-F and alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (703) 308-1044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Dwayne White
Patent Examiner
Art Unit 3745

DJW


EDWARD K. LOOK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

9/30/04